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more personal invitation in conventional form to be mailed to the more prominent musicians and heads of organizations.

As for this opening day itself, it is to be as far from a "pink tea" as possible—merely an effort to have all our resources

on display and to talk personally to as many people as possible, explaining the arrangement of the room, ascertaining each person's needs and welcoming his suggestions—an establishment of friendly relations, and an offering of service.

BEGINNINGS OF AGRICULTURAL LITERATURE IN AMERICA

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Owing to the limits necessarily set to the discussion of so broad a subject as that dealt with in this paper I shall not attempt any considerable degree of thoroughness, but shall rather content myself with touching somewhat lightly on the more important features of our agricultural literary beginnings. Frequently, it is not easy to define the limits of our proper material, since travelers and letter writers of olden times told about whatever caught their attention, and matters related to our subject are often mentioned only incidentally and briefly. Therefore, it would be expected that agricultural literature in its beginning would be merged with writing on many other subjects. Only as it increased in volume and in definiteness of aim did it become differentiated as a subject of special consideration.

The stories of the European explorers of necessity constitute the first chapter of American agricultural annals. It will be noted that although these explorers came from the most advanced civilizations of their time, and brought to the observation of the New World the acutest insight and keenest curiosity, nevertheless apart from statements of the simplest facts of natural production their records are relatively empty. The lack of an honorable and established status of agriculture itself in the Old World is perhaps largely responsible for this silence. Commerce and precious metals rather than homely products of the soil were engrossing the world's attention.

Probably the earliest item of American agricultural history of which more than shadowy tradition remains is found in the

writings of Adam of Bremen, who before 1076 quotes the words of King Svend of Denmark, who spoke to him "of an island in the ocean which is called Vinland, for the reason that vines grow wild there which yield the best of wine. Moreover, that grain unsown grows there abundantly is not a fabulous fancy."¹ Thus wild grapes and wild rice seen at some northern point on the Atlantic Coast first to come into our view. To trace their place in subsequent writings would be to tell a long but most interesting story for which we have here neither time nor space.

"Wineland, the Good," however, has been relegated by some writers to the twilight regions of history, but all agree that safe beginnings are found in the voyages of Columbus who five hundred years later saw the New World farther to the Southward. Peter Martyr² in his *Decades*, written in 1511 is believed to have first described the products found there, by the great navigator, Collins,³ who has especially investigated the history of maize, finds here the first reference to this great American contribution to the world's food supply, and to the native name "*maizium*" under which we still know it. Columbus found also a bean of some kind and a food-yielding root, perhaps cassava.

It would be interesting to review the

¹See Channing, Edw. *History of United States*, 1:2, 1905; also Reeves, Arthur M. *Finding of Wineland, the Good*. London, 1890.

²Martyr, Peter. *The Decades of the Newe Worlde or West India*. Written in the Latine tongue by Peter Martyr of Angleria and translated into English by Buscharde Eden, London, 1555.

³Collins, G. N. *Notes on the Agricultural History of Maize*. Read before the Agricultural History Society, 1919. Unpublished.

reports of the early explorers and note references made by de Soto, Cabeca de Vaca, Pénicault and others to the pecan, the butternut, and many other native food products, and to quote fully from the report of Captains Amadas and Barlowe⁴ to Sir Walter Raleigh concerning an island on the Carolina coast "so full of grapes, as the very beating and surge of the sea overflowed them."

Following the explorers who merely "looked in" and noted a few of the things seen, came the colonists who brought Europe permanently to America. They had opportunity to observe more closely and more time to record what they saw. Here again we must be content with small samples.

No account, however brief, could pass over the writings of Captain John Smith.⁵ Although Henry Adams has spoilt for us the story of the Captain's romantic rescue by Pocahontas, no shade has been cast over his account of the agriculture of the Powhatans. He found these people to be systematic farmers, working large areas of rich cleared lands chiefly situated along

the lower course of the rivers of Virginia where they grew maize, beans, tobacco, pumpkins or squashes and other crops. He tells how, when the wheat and other European crops failed them, the colony was saved by the Indians' maize, which the white men learned to grow under the tuition of a couple of Indians whom the colony was holding prisoner for some offences committed against the newcomers. We recognize clearly in these accounts many of the most characteristic features of our present American agriculture. Smith's writings were supplemented by those of several others who sometimes amplified but usually corroborated what Smith recorded.

A somewhat similar group of accounts grew up in New England about Massachusetts Bay. A like tale of maize and cleared fields, of tobacco, beans and curbits is told, also the same story of starvation and of rescue through maize planting taught by the Indians.

Of the several writers who left records, I shall cite but three: William Bradford's⁶ *Journal* (1630-1649), Nathaniel Morton's⁷ *New England's Memorial*, and John Winthrop's⁸ *Journal*.

Offering somewhat similar material for the regions occupied by the French are the vast body of writings left by the French Jesuit priests who told of the Mississippi valley, the Great Lakes, and the St. Lawrence River. This mass of writing has been brought within general reach

⁴Amadas and Barlowe. The first voyage made to the coasts of America with two barks, where in were Captaines Mr. Philip Amadas, and Mr. Arthur Barlowe, who discovered part of the Countrey now called Virginia, Anno 1584. Written by one of the said Captaines, and sent to Sir Walter Raleigh Knight, at whose charge and direction, the said voyage was set forth. Printed in Hakluyt's *The Principal Navigations . . . of the English Nation*, reprinted in *Everyman's Library*, J. M. Dent and Sons, Vol. 6:122.

⁵Smith, Captain John.

(a) A True Relation of such occurrences and accidents of noate as hath hapned in Virginia since the first planting of that Colony, which is now resident in the South part thereof, till the last returne from thence. Written by Captain Smith, Coronele of the said Colony, to a worshipful friend of his in England, London. Printed for John Tappe, and are to be solde at the Greyhound in Paules-Church-yard, by W. W. 1608.

(b) A Map of Virginia. With a Description of the Countrey, the Commodities, People, Government and Religion. By W. S. Oxford, Printed by Joseph Barnes. 1612.

(c) A Description of New England: or the Observations, and discoveries of Captain John Smith (Admiral of that Countrey) in the North of America. . . . London, Printed by Humfrey Lownes for Robert Clerke. . . . 1616.

(d) The Generall Historie of Virginia, New England and the Summer Isles. . . . London, 1624.—Above writings reprinted in *Travels and Work of John Smith*, Edward Arber, Edinburgh, 1910.

⁶Bradford, William. *Journal, the History of Plymouth Plantation, 1630-1649*. Reprinted in *Original Narratives of Early American History*, ed. by J. F. Jameson, New York, 1906.

⁷Morton, Nathaniel. *New England's Memorial*, or a brief relation of the most memorable . . . passages of the Providence of God, manifested to the Planters of New England. Reprinted in *Everyman's Library* under the editorship of John Masefield with the title "Chronicles of the Pilgrim Fathers." J. M. Dent & Sons, London. (This volume contains Winslow's Narration, Smith's *New England's Trials*, Cushman's Discourses and other source material concerning this subject.)

⁸Winthrop, John. *Journal, History of New England*. Reprinted in *Jameson's Original Narratives of Early American History*, New York, 1908.

through the efforts of Thwaites⁹ and his associates.

As these missionaries were much on foot they saw the country, its products and its peoples over great areas, and, being attached to missions had some of the viewpoints of settlers.

With this hasty reference we must pass on to that part of agricultural literary development which grew out of an established and spreading colonial population. The situation of the Jamestown and Plymouth colonists must of necessity have persisted in certain phases as long as there was a raw frontier where the native had to be dealt with "in the rough." There was, however, one important exception, this later skirmish line could fall back more readily on saving support than in the days when the Europeans clung with a precarious grip to the fringe of the American continent. But as ax and firearms were laid aside for the plow and the anvil, the life of the population moved in a quite different round and agricultural literature in so far as any was written took on a different character. Emigrants who had come to make homes for themselves in the colonies wrote letters to friends or kinsfolk in England telling how they lived in the New World. Travelers from home came to see how life fared with the pioneers. Perhaps they remained and became such themselves, perhaps they returned home with experiences to tell. This period was marked by a close connection with Europe, and by frequent passing back and forth.

As representatives of this period in tide-water Virginia we may cite John Clayton's¹⁰ *Letter from Virginia*. Clayton started for America with the intention of giving it philosophical attention, having with him "Books, Chymical Instruments, Glass-

es and Microscopes," which he had the misfortune to lose at sea. Nevertheless, he made many observations. His description of the growing and handling of tobacco is full and amazingly applicable now. He discussed the use of corn blades for fodder, the importance of drainage, and the vigor of American thunderstorms. He talked over the fur trade with Col. Wm. Byrd, and described the prevailing bad methods of Virginia planters, which seem already to have become habits. Cattle raising and cow penning in relation to fertility are dealt with in very modern terms. He described the shell marl beds on the lower James and prescribes "the red and blew marle" found "at some breaks of hills" "as the properest Manure for their Sandy Land."

Belonging essentially to this stage of progress is Francis Moore's *Voyage to Georgia*¹¹; also Josselyn's¹² *Account of Two Voyages to New England*, and Peter Kalm's¹³ *Travels*. As the fighting line of European advance moved inland this type of frontier writing continued for a long time to come from farther west.

Overlapping this type of writing in time but representing a more mature development, we find the first definitely agricultural writing. Dominated usually by English influence, this work is colonial in its flavor but begins to show evidence of local experimentation and of original thinking. The effect of Tull's¹⁴ *Horse-Ho-*

¹¹Moore, Francis. *A Voyage to Georgia, begun in the year 1735. Containing An Account of the Settling of the Town of Frederica, in the Southern Part of the Province, and a description of the Soil, Air, Birds, Beasts, Trees, Rivers, Islands, &c.* . . . London, 1744.

¹²Josselyn, John. *An Account of Two Voyages to New England, made during the Years 1638, 1663, Boston, 1865.*

¹³Kalm, Peter, *Beschreibung der Reise, die er nach dem nördlichen Amerika machte.* 3 Bde. Göttingen, 1744.

Kalm, Peter, *Travels into North America (1748-49).* Transl. by John R. Forster, 3 vols. Vol. I, Warrington, 1770, Vols. II, III, London, 1771.

¹⁴Tull, Jethro. *The Horse-Hoing Husbandry; or an Essay on the Principles of Tillage and Vegetation. Wherein is shewn a Method of introducing a sort of Vineyard Culture into the Corn-fields, in order to Increase their Product, and diminish the common Expense, by use of Instruments described in Cuts.* By I. T. . . . London, 1733.

⁹Thwaites, Reuben Gold. *The Jesuit Relations and Allied Documents.*—Transl. by Robertson and Blair, 73 volumes.

¹⁰Clayton, John. *A Letter from Mr. John Clayton, Rector of Crofton at Wakefield in Yorkshire, to the Royal Society, May 12, 1688, giving an Account of several Observables in Virginia, and in his Voyage thither, more particularly concerning the Air.* *Miscellanea Curiosa*, 3:281-355.

ing (sic.) Husbandry, first printed in 1733 in England, was somewhat delayed in reaching America, but when it did arrive it was powerful and lasting.

Perhaps the most important result it had in America was to stimulate a Connecticut clergyman named Jared Eliot to turn his attention to experimental agriculture. Eliot, who was a grandson of John Eliot, the Roxbury missionary to the Natick Indians, never gave up preaching but at the age of 62 years relinquished an extensive medical practice in favor of this new avocation. He planned and carried out experiments along many lines of farm practice and noted down the results for his essays.¹⁵

It was his intention to put out each year the results of his observations and experience, and he asked others of like interest to send in contributions. The word *Essay* was here used by Eliot in the sense of *experiment* or *attempt* and the title of his annual at the present time would be paraphrased perhaps as "Experience in Farm Practice in New England," etc. Eliot was a large landowner and tried out many things on his own premises. He was greatly interested in drainage and in the utilization of the rich lowlands. He urged the use of red clover as a soil renovator and concerned himself

much with pasture and meadow grasses. Through his correspondence with the English cloth manufacturer, Peter Collinson, who was a veritable headquarters for the exchange of world plant products, Eliot was able to get and test seeds of many new crop plants.

Eliot sometimes found his attempts to publish interfered with by Governmental demands on the printing facilities of the country, and was obliged to await his chance. But in spite of these troubles between 1748 and 1759, the dates of his first and last essays, respectively, he was able to print six essays. These were brought together in a single volume in 1760. Through these annual reports of Eliot's agricultural experiment station ran the philosophy of Tull and one essay, the fifth, (1754), is devoted to an excellent explanation of that philosophy to which Eliot added the results of his own attempts to apply and to improve the methods of the great English exponent of tillage.

This is a truly American performance, and constitutes the first considerable native contribution to constructive agricultural writing. It would be difficult fully to estimate its influence, but it has been easy to underestimate it. It would be a pleasure to discuss more fully this remarkable achievement and to touch on some of the other ways in which Eliot influenced the life of New England, but this must be done in another place.

It would be safe to say that Eliot's Essays are the most considerable American agricultural writing during the colonial period.

Before leaving this part of our subject it should be pointed out that much valuable agricultural literature was put into the law books of the several colonies. The laws are in reality a somewhat tardy but in the end rather faithful reflection of public movement. It would be a pleasure to give many concrete examples showing the value of this portion of the early literature, but present limits forbid.

We pass now to a later phase of our subject. The literature of the agricultural

¹⁵A full citation of Eliot's agricultural writings is not attempted here. Eliot, Jared.

(a) *An Essay upon Field-Husbandry in New England as it is, or may be ordered.* New London: T. Green, 1748. 8 mo.

(b) *A Continuation of the Essay upon Field-Husbandry, as it is or may be ordered in New England.* New London: T. Green, 1749. 8 mo.

(c) *A Continuation of the Essay on Field-Husbandry, with an Appendix by Ebenezer Silliman.* New London: T. Green, 1751. 8 mo.

(d) *A Continuation of an Essay upon Field-Husbandry, as it is or may be ordered in New England. Part IV.* New York: J. Parker and W. Wayman, 1753. 12 mo.

(e) *A Continuation of an Essay upon Field-Husbandry, as it is or may be ordered in New England. Part V.* New London: T. Green, 1754—also New York: J. Parker and W. Wayman, 1754. 12 mo.

(f) *Essays upon Field-Husbandry in New England, as it is or may be ordered.* Boston, Edes and Gill, 1760. 8 mo.

Several other printings of the collection were made and a much mangled edition brought out by the Massachusetts Society for the Promotion of Agriculture in Papers for 1811 (Boston, Munroe and French, 1811) seems to have been the latest.

pioneer was still prominent, is still and will be as long as we have agriculture facing the wilderness. But as the Revolution approached, there are signs of much highly promising activity. Settlements had become larger, neighbors lived nearer together and the coming of organization began to be strongly indicated. Writers in the newspapers dealt frequently with matters of agriculture as did the proceedings of the young Philosophical Society founded by Franklin in 1743. Much of this was stopped by the demands made on time, energy and property by the Revolution, and there is little to record until after the new nation had time to get its breath after the exhausting struggle for freedom.

Before we pass on to the post-Revolutionary period, it is worth while to notice a book on American husbandry¹⁶ written by one who knew it well, in which we have preserved a remarkable picture of agriculture in the colonies. Carrier¹⁷ has shown that this summary view was in all probability drawn up by Dr. John Mitchell, who after living some years in Virginia, went to England prior to the time of writing it. This book presents with much force and ability conditions existing in each colony from Nova Scotia to Georgia. The broad view and the clear understanding displayed in this work make it an important landmark standing between the old and the new. Here for the last time America is viewed as an object of interest mainly as a feeder for British interests, as a people to be governed, and made to serve as a part of the system of the Mother Country.

After the Revolution, the former colonists saw themselves as a part of no such system. Henceforth, they were to exist

for themselves. The rest of the story is essentially that of a people trying to realize their separate destiny. The effect of this release from the leading strings of British regulation and limitation was seen in the springing up of organized activity in many directions. Books on agriculture came in increasing numbers. A brief mention of a few of them must suffice.

Written out of the times before the Revolution although printed after its close, were J. Hector St. John's *Letters from an American Farmer*.¹⁸ This book sheds much light on the agriculture of the times, but perhaps because it is written in a poetic, almost idyllic, strain, it has taken its place among the belles lettres rather than among works on agriculture. It is well worth anyone's time to read this book and see the New World fresh and life unspoiled as it looked to this emancipated European. His book is almost a hymn to the joys of free life next the fresh soil of the New World. This naturalized Frenchman returned to France as war between colonies and mother country drew on, and he spent the rest of his life there in the circle of the friends of freedom. Besides his letters he wrote other works which we must pass by here.

The first distinctively post-Revolutionary writer on agricultural matters to whom we shall refer was John Beale Bordley,¹⁹ the author of several smaller works and of a

¹⁸(Crevecoeur) J. Hector St. John.—*Letters from an American Farmer*; describing certain provincial situations, manners and customs, not generally known; conveying some idea of the late and present interior circumstances of the British Colonies in North America. Written for the information of a friend in England by J. Hector St. John (Crevecoeur), a farmer in Pennsylvania. London: 1782. Reprinted in Everyman's Library, J. M. Dent & Son, with a useful introduction by Warren Barton Blake.

¹⁹Bordley, John Beale.

(a) A summary of the courses of crops in the husbandry of England and Maryland; with a comparison of their products; and a system of improved courses, proposed for farms in America. Charles Cist, Philadelphia: 1784. 4 to. (A discussion of crop rotations.)

(b) Sketches on rotation of crops. Charles Cist, Philadelphia: 1792. 8vo.

(c) Country Habitations. (1798)

(d) Essays and Notes on Husbandry and Rural Affairs with Plates. Philadelphia: 1799. 8vo.

(e) *Ibid.* 2d ed. Philadelphia: 1801. 8vo.

¹⁶American Husbandry, containing an Account of the Soil, Climate, Production and Agriculture of the British Colonies in North America and the West Indies, with Observations on the Advantages and Disadvantages of Settling in them Compared with Great Britain, and England. By an American. 2 vols. London: 1775.

¹⁷Carrier, Lyman. Dr. John Mitchell, Naturalist, Cartographer, and Historian. Annual Report of the American Historical Society, 19—, p. Government Printing Office, Washington, D. C., 1920.

rather imposing volume of *Essays and Notes* in which late in life he collected his former earlier writings. Bordley was an elderly man when the Revolution came, high in honor at Annapolis as a royal judge, and a farmer by avocation. The Stamp Act alarmed him for the future. Loyal to the colonial cause he withdrew more and more to his land where from his home on Wye Island in Chesapeake Bay and from his other lands he sent boatloads of beef and other provisions to the army starving at Valley Forge. He conducted a veritable experiment station on Wye Island, printed his results in the form of broadsides and handbills which he distributed among interested friends at court sessions or nailed to trees, fences and doors where he thought they might catch the attention of possible readers. He was perhaps the first agricultural extension worker in the country. His old books are full of good stuff for us even now. Intellectually he was a descendant of Tull and Jared Eliot.

Among the books of this period likely to attract the eye was Samuel Deane's *New England Farmer, or Georgical Dictionary*.²⁰ This may be taken as a type of works of the dictionary sort which consisted of brief paragraphs or treatises on agricultural subjects arranged alphabetically.

Oftentimes these products had a decidedly English flavor, and contained little original. Such was a volume of *Gleanings* reprinted in Philadelphia from a London edition, "interspersed with Remarks and Observations by a Gentleman of Philadelphia."²¹ Bordley did much of this sort of thing in addition to the more original

work referred to above, and in his later days he lived in Philadelphia.

It is a question whether we can lay valid claim to the Almanac and Calendar as agricultural literature, but these annual compilations were frequently made the vehicle for carrying agricultural matter. Franklin's *Poor Richard's Almanack* seems to have set the style before the Revolution, and its successors preserved many of its mechanical characteristics. In addition to information concerning the state of the heavens and the proper correlation of these with farm operations occur such little gems as Mrs. Martha Logan's *Gardener's Calendar*.²² This *Calendar* sometimes with credit given, sometimes without, seems to have long survived the author herself. But since Almanacs deserve and have received special consideration at the hands of others I will content myself with merely calling attention to the one concrete instance already cited. It may be observed, however, that the almanac had a more conspicuous development in the North than in the South.

The sort of *omnium-gatherum* seen in the Almanac did not always stop with the meagre dimensions of these unpretending pamphlets nor is the literature of "moon farming" exhausted by reference to almanacs.

²²Logan, Mrs. (Martha). *Gardeners' Calendar* known to succeed in Charleston and its vicinity for many years. Printed in following almanacs:

(a) *Palladium of Knowledge; or the Caroline and Georgia Almanac*, for the year of our Lord, 1798. . . . Charleston (occupies 3 closely printed pages).

(b) *South-Carolina and Georgia Almanac* for the year of our Lord, 1799. . . . Charleston: Printed by Freneau and Paine. Author's name omitted but otherwise as in (a).

(c) *Palladium of Knowledge* for the years 1800, 1801, with some omissions, 1802 printed in full, 1804 in full. With author's name.

(d) *The Mirror; or Carolina and Georgia Almanac*, for the Year of our Lord, 1803, Charleston. Without author's name.

These calendars were seen by the writer in the collection of the Charleston Library Society, Charleston, S. C., through the courtesy of Miss Ellen Fitzsimmons, the Librarian. Readings were not collated nor was the relation investigated between this calendar and

(e) *A Treatise on Gardening*, Charlestown, 1772. Evans cites this item on the authority of Allibone, who says that she wrote the treatise at the age of 70 years.

²⁰Deane, Samuel. *The New-England Farmer; or Georgical Dictionary*; containing a compendious account of the ways and methods in which the most important art of husbandry in all its various branches is, or may be practiced to the greatest advantage of the country. Printed at Worcester, Massachusetts, by Isaiah Thomas. 1790.

²¹Gentleman of Philadelphia. *Gleanings from the most celebrated Books on Husbandry, Gardening, and Rural Affairs*. From the London Second Edition of 1803. Philadelphia: 1803.

*The New Book of Knowledge*²³ takes us back to 1767 when it began "to shew the effects of the planets and other astronomical constellations," on the husbandman's practice, and to offer "prognostications forever." Later editions came from the press of Isaiah Thomas—"near the Mill-Bridge," Boston.

A successor seems to have appeared after the Revolution in "Erra Pater"²⁴ whose *Book of Knowledge* offered much more than "prognostications forever." This writer says he is a "Jew doctor in astronomy, born in Bethany, near Mount Olivet, in Judea." As a part of his volume he offers a farmer's calendar, containing perpetual prognostications for weather and the whole mystery of husbandry, also information on health for human beings and for animals, a treatise on palmistry and the significance of moles, the interpretation of dreams, and more like it.

It may seem that this type of literature is over-dignified by this mention, but when we realize that Jared Eliot directed his readers to the signs of the Zodiac for the best time to cut brush, we need little imagination to see what this type of thing meant to New England agriculture in those days. I say New England because I have found little evidence of any similar reign of this type of superstition in the South. It may, however, have merely escaped me.

Let us turn now from this literary by-way to the main traveled road and follow for a little the development of agricultural organizations, and the literature that grew out of them. Between 1785 and 1790, several of these societies "for the promotion of agriculture" came into existence. They were usually composed of prominent men living in the larger cities and represented the progressive type of citizen, who, whether himself a practical farmer or not,

was interested in any movement that might promote the general welfare. Then, too, as John Taylor of Caroline pointed out twenty years later, nine-tenths of the population were rural and a gain to the farmer meant general progress. These societies were organized on very similar lines, consisting of an active membership fairly well localized in some city and additional active and honorary members living at a greater or less distance. Since travel was slow and uncomfortable, and attendance at meetings was often small, the importance of publications was recognized. The Philadelphia Society made use of the newspapers for some years and in some instances printed specially important addresses in pamphlet form. In most cases, however, sooner or later these isolated contributions were brought together with lists of premiums offered, rosters of membership, contributions received and the memoirs or papers presented at the meetings or sent in to the officers for printing. These volumes of memoirs form a most important type of agricultural literature. Here the leaders presented in permanent form the agricultural theory and practice of the day.

Although the Massachusetts Society for Promoting Agriculture was not organized until 1792, some seven years later than similar societies in South Carolina and Pennsylvania, and one year later than that of New York, it brought out its first volume of papers in 1799, shortly in advance of New York and nine years before Pennsylvania (1808). The early issues were reprinted in many cases with more or less change as demand for the work justified.

These volumes continued to appear either as relatively large collections separated by longer intervals as in the Philadelphia Society Memoirs or as relatively thin numbers appearing more frequently seen in the Massachusetts series. The length of the series was usually cut short by the death of the organization. The New York Society lasted as long as Robert R. Livingston, unfortunately but a short time; the Philadelphia Society died after

²³The New Book of Knowledge. Shewing the effects of the planets and other astronomical constellations. Together with the husbandman's practice; or prognostications forever. Boston: 1767.

²⁴Pater, Erra. The Book of Knowledge; treating of the wisdom of the Ancients: made English by W. Lilly. . . . Haverhill: 1790.

about twenty-five years, on the death of its president, Richard Peters.

This phase of agricultural literature was in every respect highly creditable to the young republic and compared very well with similar publications appearing at that time in England, Ireland and Scotland. It represented the first flush of youthful vigor and presented matter that with respect to quality has seldom been excelled in our subsequent agricultural writing. Here the results of scientific progress came to the front as soon as made public and were applied to the practical questions of the farm. The best brains of the country were engaged and farming was as honorable an occupation in the public esteem as any in which one could engage.

The literature of the early agricultural societies is even now worth reading and when one is feeling proud of the progress made in this day let him turn to these old writers and see how plain farmers worked out the life history of the Hessian fly a decade before the scientists described the insect.

Literature dealing with live stock matters was represented earliest of all by veterinary works of which Gibson's *Farriers' Dispensatory*²⁵ may be taken as an instance. Books of this character seem to have been in steady demand from that time on. Probably the most influential work dealing with a single kind of animal was Robert R. Livingston's *Essay on Sheep*,²⁶ two editions of which were printed by order of the New York Legislature.

Probably the most important early work on mineral applications to the soil was a pamphlet written in 1797 by Judge Rich-

ard Peters,²⁷ President of the Philadelphia Society for Promoting Agriculture. This consists of a questionnaire on the methods of application of and results gained by the use of plaster of Paris or as it is more commonly called, land plaster. In Europe, this calcareous deposit had been found beneficial to crops grown on land to which it had been applied. It had been introduced into Pennsylvania soon after the Revolution and had gradually found increasing use in the eastern part of the state. Peters here brings together and summarizes the accumulated evidence. In two decades plaster of Paris had become a staple subject for discussion in all agricultural circles from north to south. New sources had been discovered and it became a regular article of sea transport along the Atlantic Coast from the quarries in the Bay of Minas, in Nova Scotia. In time it played an important part in the so-called "Loudoun" system of farming. This system took its name from a county in Virginia in which land plaster had been used with especially good effect.

We must pass over the writings in which agriculture and manufactures found their way into politics hand in hand. The later greenback movement was foreshadowed, the still troublesome question of agriculture and protective tariff was broached and the dark shadow of the slavery question had begun to fall across the land.

These matters and many more were dealt with by one whom we may regard as our earliest writer to treat agriculture philosophically, Colonel John Taylor of Caroline. This Virginia planter lived on the banks of the Rappahannock near Port Royal, where he became known as a disciple of Jefferson. Bringing a keen mind and a keener tongue to bear on the political and economical problems of the day, he was ready and able to discuss theories of plant nutrition, currency and banking, crop rotation, and much more with great

²⁵Gibson, William. *A Farriers' Dispensatory*, in three parts. Containing A Description of the Medicinal Simples . . . made use of in the diseases of horses. Philadelphia: 1724.

²⁶Livingston, Robert R.

(a) *Essay on Sheep; their varieties—Account of the Merinoes of Spain, France, &c.; Reflections on the best method of treating them, and raising a flock in the United States; together with miscellaneous remarks on sheep and woollen manufactures.* New York: 1809. (1st edition.)

(b) *Essay on Sheep—Second Edition.* New York: 1810.

²⁷Peters, Richard. *Agricultural Enquiries on Plaister of Paris—Philadelphia, 1797; also as an appendix to Memoirs of Philadelphia Society for Promoting Agriculture. Vol. 2, 1810.*

effect. Probably his *Arator*²⁸ first published anonymously in 1813 influenced post-Revolutionary agriculture more than any other single writing. This book ran through six editions in about as many years and was widely quoted for decades in the agricultural periodicals that sprang up later.

This brings us to the last of the topics that I shall mention here, the agricultural press. The agricultural societies usually led an uncertain existence and offered no adequate outlet for the stream of agricultural writing that began to flow in that period of activity following the Revolution. However, the difficulties of the postal service and the expense involved helped to delay the appearance of agricultural periodicals. The first clearly differentiated publication of this sort that has come to my attention appeared in Georgetown, D. C., in 1810. It was known as the *Agricultural Museum*²⁹ and was published as a bi-monthly under the editorship of David Wiley, Postmaster at Georgetown and teacher in the Columbian Academy there. He became Mayor and was active in many lines of organization work. The paper continued for more or less of two years. This probably went down with many other promising beginnings beneath the weight of the second war with Great Britain.

After the war had been fought out and the country had again gathered the energy required for reconstruction, a longer lived journal was established by John S. Skinner, postmaster of Baltimore, lover of fast

horses and manager of Lafayette's interests in America. Skinner started the *American Farmer* in March, 1803, as a weekly printing about four hundred pages to the volume and carried it on for about eleven years. It then (1829-30) passed into the hands of Gideon B. Smith who continued it along the old lines for several years. This periodical is often referred to as the oldest agricultural paper in the country. Except for purposes of strict accuracy this credit really belongs to it. This publication as would be expected had something of a journalistic character, but printed the more serious material in great proportion. Its appeal was obviously to a highly intelligent public and would set a high standard in the rural journalism of today. It printed many original contributions on subjects related to agriculture, considering this relation broadly, and the names of many leaders of American thought in those days appeared in the list of contributors. Jefferson, Col. John Taylor of Caroline, Caesar A. Rodney of Delaware, James Madison, Edmund Pendleton, Timothy Pickering, Dr. Samuel L. Mitchel, Lewis De Schweinitz, James Barbour and Henry Clay are names taken at random. Public improvements, new agricultural machinery (of which the country was already hearing much), fertilizers, agricultural societies and their fairs, the problems of farm management and much beside were discussed. It was a live paper and is now an indispensable source of information and of atmosphere for the times of revival following the fighting time of our national youth. Soon came the age of machinery, cotton, westward expansion, and slavery. With this age of acceleration, made possible largely by mechanical appliances, a new period opens and that with which we have been dealing draws to a close.

²⁸A Citizen of Virginia—

(a) *Arator*; being a series of Agricultural Essays, practical and political. In sixty-one numbers. Georgetown, Columbia (sic.) 1813. First edition.

(b) *Ibid.* Petersburg, Va., 1818, sixth edition.

²⁹Bryan, Wilhelmus Bogart. *A History of the National Capital*—Vol. 1, p. 596, New York, 1914.

Parts of two volumes of the *Museum* are to be found in Washington, at the Library of the Department of Agriculture and in the Library of Congress.